

STATIC RANDOM ACCESS MEMORY DEVICE HAVING
REDUCED LEAKAGE CURRENT DURING ACTIVE
MODE AND A METHOD OF OPERATING THEREOF

ABSTRACT OF THE DISCLOSURE

An Static Random Access Memory (SRAM) device and a method of operating the same. In one embodiment, the SRAM device includes:

- (1) an SRAM array coupled to row peripheral circuitry by a word line and coupled to column peripheral circuitry by bit lines and
- (2) an array low voltage control circuitry that provides an enhanced low operating voltage V_{ESS} to the SRAM array during at least a portion of an active mode thereof.